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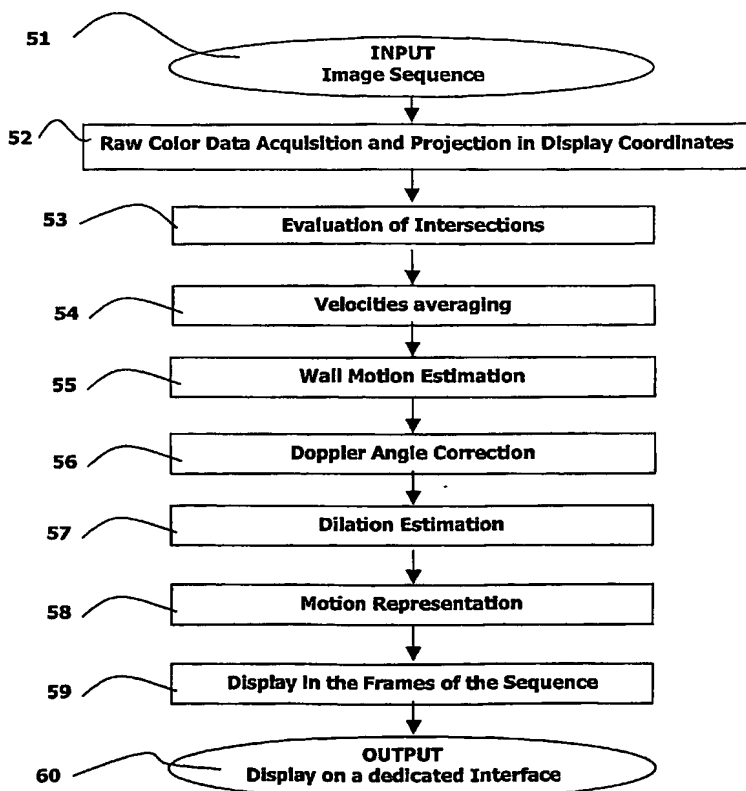
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(54) Title: **ULTRASONIC DOPPLER SYSTEM FOR DETERMINING MOVEMENT OF ARTERY WALLS**



(57) **Abstract:** The invention relates to an ultrasonic viewing system, for displaying images of an artery using a curved array of transducer elements, comprising means for acquiring (51) of an ultrasonic image sequence and a Doppler color sequence of a segment of artery explored along its longitudinal axis and having walls moving in relation with the cardiac cycle; and comprising processing means for: estimating the velocity and motion amplitude (53, 54, 55) of the artery walls along Doppler color ultrasound scanning lines; estimating the motion amplitude (58) of the artery walls along lines perpendicular to the artery global axis; and further comprising: display means for displaying (60) curves of this last artery wall amplitude on a dedicated display on which the user may have interaction. The invention further relates to an image processing method having steps to be carried out using this system.



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